Spec. <u>45576</u>

PART F - DETAILED SPECIFICATIONS

DIVISION F2 - DETAILED REQUIREMENTS

- 1. <u>General</u>: The scope of this Contract includes the design, procurement, fabrication, delivery, installation, and start-up of modifications to the Intermountain Generating Station (IGS) Unit 1 and Unit 2 Steam Generators.
 - a. These Contract modifications shall provide for a continuous boiler operation of 6,900,000 lbs/hr output, 1005°F superheat and 1005°F reheat temperature. These modifications shall also include an OFA system capable of providing a reduction in NOx emissions as specified in Article 11 of this Section entitled "Performance Guarantees".
 - b. Within the design phase of the Work, Contractor shall review all operational impacts on associated equipment and systems such as fans, burners, and dampers. Any concerns regarding operating limitations or increase power demands noted within the modeling/design phase shall immediately be brought to the attention of the Contract Administrator.
 - c. A primary focus of this Contract shall be the optimization of the Work to occur during Unit off-line hours. Detailed planning of the Contract Work Scope shall include a level of redundancy in equipment and manpower to ensure that guaranteed schedules are achieved.
- 2. <u>Project Scope</u>: The successful bidder shall provide and complete the following Work:
 - a. <u>Boiler Model</u>: Contractor shall prepare and utilize a representative boiler model to determine the proper design, arrangements, operating guidance, and operational impact associated with the boiler modifications within this Contract. A complete set of model inputs and results of the various model runs shall be provided to IPSC as part of IPSC's design review of this Project. Among the operational impacts evaluated shall be:
 - (1) Superheat Temperature and Pressure
 - (2) Reheat Temperature
 - (3) Furnace Exit Gas Temperature
 - (4) Economizer Exit Gas Temperature
 - (5) Generation of Oxides of Nitrogen
 - (6) Furnace Heat Absorption and Cleanliness
 - (7) Superheat and Reheat Attemperator Sprays
 - (8) Carbon Monoxide Generation
 - (9) Burner Metal Temperatures both In-Service and Out-of-Service